Form No. 3354-521 Rev A

Light Kit

For Z400 and Z500 Series Z Master® Mowers

Model No. 107–9880

Installation Instructions

Installation

Loose Parts

Use the chart below to verify that all parts have been shipped.

Step	Description	Qty.	Use
1	Template	1	Drill the holes for the front lights.
2	Diesel adapter wire harness Fuse (20 amp)	1 1	Install the diesel adapter wire harness (diesel models only).
3	Wire harness	1	Install the wire harness.
4	Lamp (without a switch) Lamp (with a switch) Front lamp brackets Side lamp bracket Flat washers Rubber grommets	2 1 2 1 6 3	Assemble the lamps and brackets.
5	Bolt (5/16 x 3/4 inch) Nut (5/16 inch) Curved washer Bolt (3/8 x 3/4 inch) Cable tie Harness clip	2 2 2 1 2 2	Install the lamps. (Some parts are repeated in Step 6 for the Z500 Series Mowers. You will have extra parts after installing the lamps.)
6	Bolt (5/16 x 3/4 inch) Nut (5/16 inch) Curved washer Cable tie Harness clip	5 5 5 2 2	Install the lamps. (Some parts are repeated in Step 5 for the Z400 Series Mowers. You will have extra parts after installing the lamps.)
7	Fuse (20 amp)	1	Install the Fuse

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Step 1

Drilling the Holes for the Front Lights (Z500 Series Mowers)

Parts needed for this step:

1	Template

Procedure

Note: Perform this procedure only if there are no pre-drilled holes in the footrest for the front lights. If you are installing this kit on a Z400 series mower, skip this procedure.

1. Position the template (Figure 1) on either the left or right side of the front of the footrest.

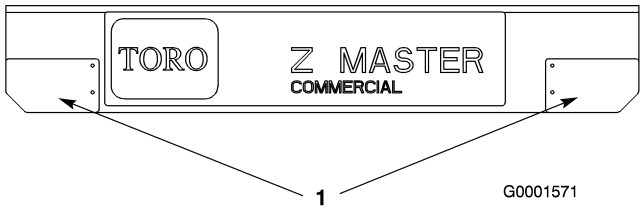


Figure 1

1. Template

Note: Ensure that the outer edge of the template matches the outer edge of the footrest.

2. Mark the position of the holes on the front of the footrest with a metal punch.
3. Drill 2 holes (3/8 inch diameter) in the locations that you marked in step 2.
4. Repeat steps 1 through 3 for the other side of the front of the footrest.

Step 2

Installing the Diesel Adapter Wire Harness

Parts needed for this step:

1	Diesel adapter wire harness
1	Fuse (20 amp)

Procedure

Note: This step is only for diesel machines that do not have an open connector on the main wire harness (Z597 Mowers). If you have an open connector on the main wire harness, go to Installing the Wire Harness.

1. Install the 20 amp fuse into the fuse connector on the diesel adapter wire harness.
2. Remove the 4 screws (Figure 2) that hold the control panel in place.

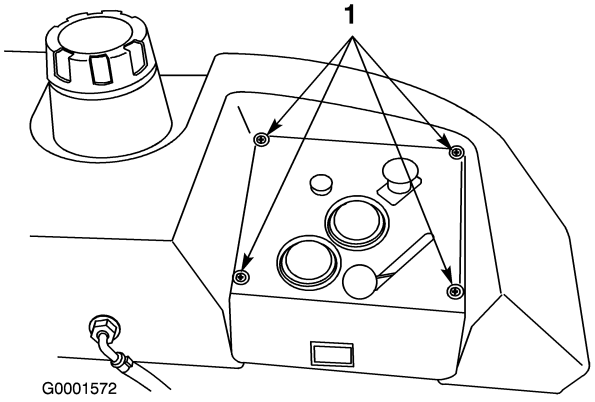


Figure 2

1. Control panel screws

3. Lift up the control panel and find the terminals on the back side of the volt meter (Figure 3) located on the underside of the panel.

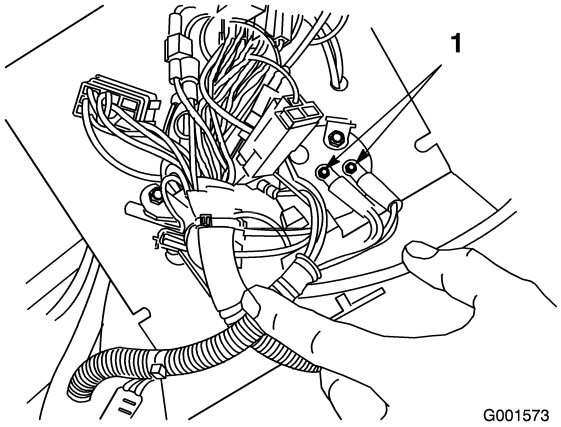


Figure 3

1. Terminals on the back side of the volt meter

4. Connect the terminal ends of the diesel adapter wire harness to the terminals on the back side of the volt meter.
5. Install the control panel and secure it with the 4 screws that you removed in step 2.
6. Connect the diesel adapter wire harness to the light kit wire harness.

Step 3

Installing the Wire Harness

Parts needed for this step:

1	Wire harness

Procedure

Note: If you installed a diesel adapter wire harness, skip this procedure.

1. Locate the open connector on the main wire harness (Figure 4).

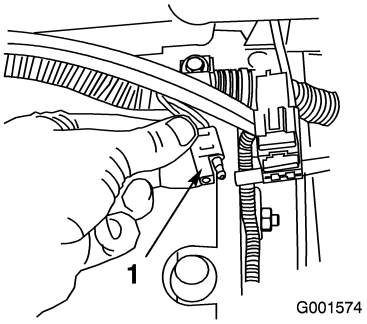


Figure 4

1. Open connector on the main wire harness

2. Connect the light kit wire harness connector to a connector on the main wire harness (Figure 5).

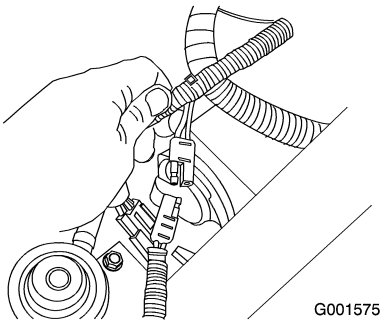


Figure 5

3. Route the light kit wire harness (Figure 6) along the frame.

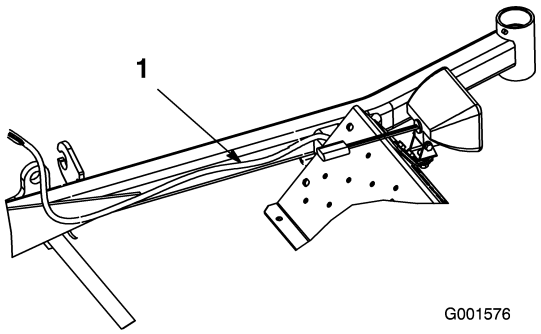


Figure 6

1. Light kit wire harness

Step

4

Assembling the Lamps and Brackets

Parts needed for this step:

2	Lamp (without a switch)
1	Lamp (with a switch)
2	Front lamp brackets
1	Side lamp bracket
6	Flat washers
3	Rubber grommets

Procedure

Important: This procedure varies depending on whether you are installing this kit on a Z400 or Z500 series mower. The illustrations depict the differences.

1. Remove the nut and washer from one of the lamps without a switch (Figure 7 for Z400 series mowers or Figure 8 for Z500 series mowers).

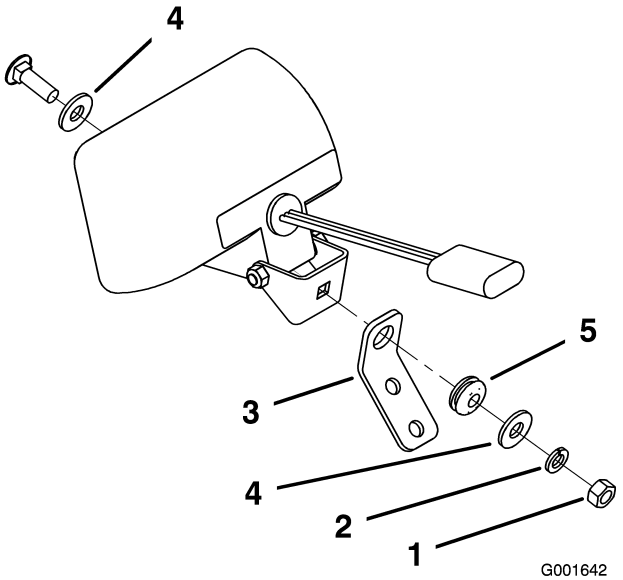


Figure 7

Configuration for **Z400 Series Mowers**

1. Nut
2. Washer
3. Front lamp bracket
4. Flat washers
5. Rubber grommet

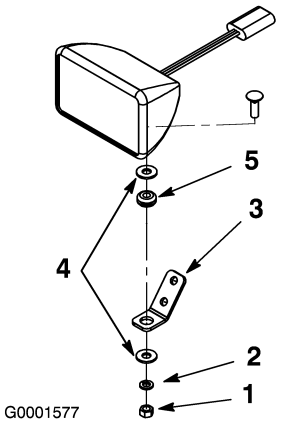


Figure 8

Configuration for **Z500 Series Mowers**

1. Nut
2. Washer
3. Front lamp bracket
4. Flat washers
5. Rubber grommet

2. Secure the lamp onto one of the front lamp brackets as illustrated for your mower in Figure 7 or Figure 8, using 2 flat washers, a rubber grommet, and the washer and nut you removed from the lamp in step 1.
3. Repeat steps 1 and 2 for installing the other lamp without a switch to the other front lamp bracket.
4. Remove the nut and the washer from the lamp with a switch (Figure 9 for Z400 series mowers or Figure 10 for Z500 series mowers).

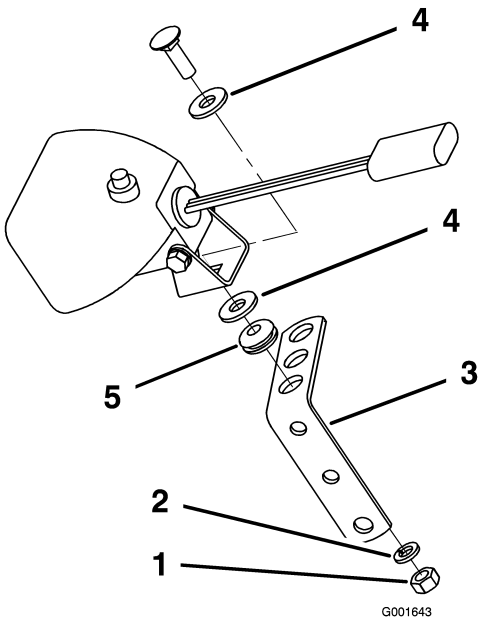


Figure 9

Configuration for **Z400 Series Mowers**

1. Nut
2. Washer
3. Side lamp bracket
4. Flat washers
5. Rubber grommet

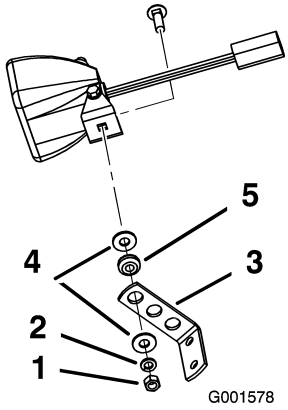


Figure 10

Configuration for **Z500 Series Mowers**

1. Nut
2. Washer
3. Side lamp bracket
4. Flat washers
5. Rubber grommet

5. Install the lamp with the switch onto the side lamp bracket as illustrated for your mower in Figure 9 or Figure 10, using 2 flat washers, a rubber grommet, and the washer and nut you removed from the lamp in step 4.

Step 5

Installing the Lamps (Z400 Series Mowers)

Parts needed for this step:

2	Bolt (5/16 x 3/4 inch)
2	Nut (5/16 inch)
2	Curved washer
1	Bolt (3/8 x 3/4 inch)
2	Cable tie
2	Harness clip

Procedure

Note: If you have a Z500 series mower, skip this procedure.

1. Install the 2 front lamps (with brackets) onto the front of the footrest with 2 bolts (5/16 x 3/4 inch), curved washers, nuts (5/16 inch), and harness clips (Figure 11).

   Note: Before installing the nut on each of the bolts, slip the harness clips onto the light kit wire harness and install each of the clips on a bolt between the backside of the footrest and the hex nut (Figure 11).

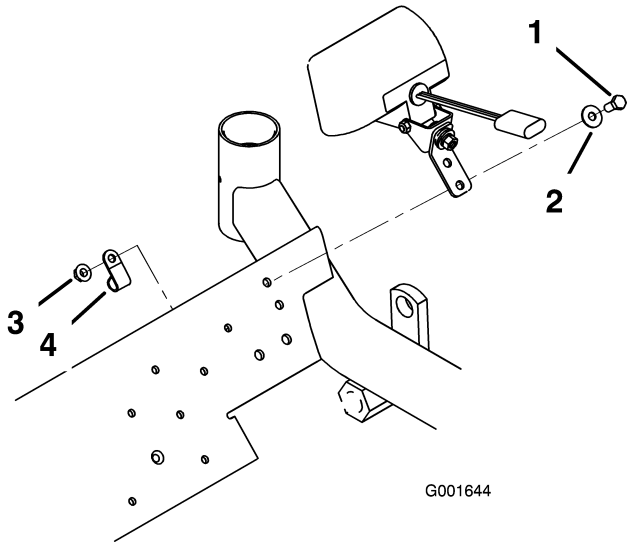


Figure 11

2. Secure the side lamp and attached bracket to the frame using a bolt (3/8 x 3/4 inch) (Figure 12).

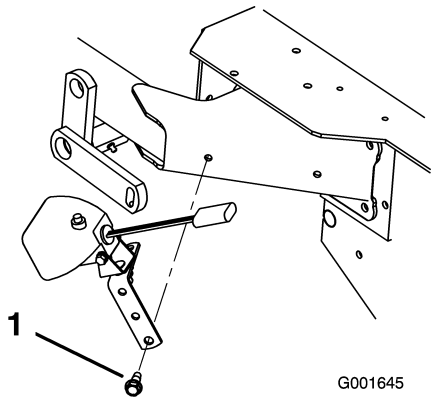


Figure 12

3. Connect the side light wire connector to the light kit wire harness connector (Figure 13).

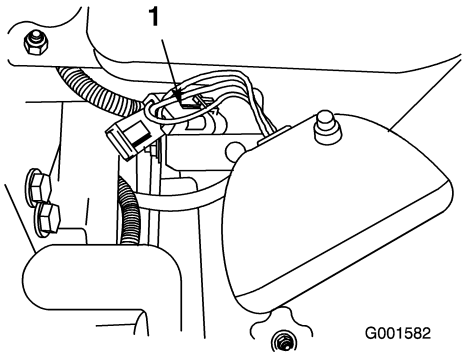


Figure 13

1. Light kit wire harness connector

4. Connect the 2 wire connectors of the front lights to the connectors on the light kit wire harness (Figure 13).
5. Secure the light kit wire harness to the frame with 2 cable ties, one near the left front light and the other toward the control panel (Figure 14).

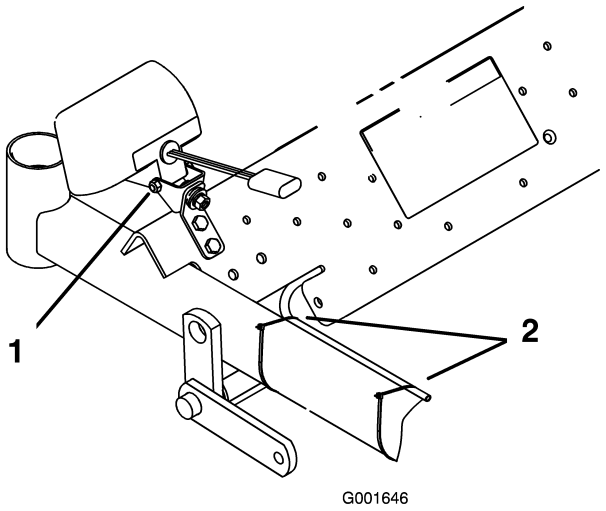


Figure 14

1. Nut on the lamp bracket
2. Cable tie

6. Set each lamp to the desired position and tighten the nut on the lamp bracket (Figure 14).

Step 6

Installing the Lamps (Z500 Series Mowers)

Parts needed for this step:

5	Bolt (5/16 x 3/4 inch)
5	Nut (5/16 inch)
5	Curved washer
2	Cable tie
2	Harness clip

Procedure

Note: If you have a Z400 series mower, skip this procedure.

1. Install the 2 front lamps (with brackets) onto the front of the footrest with the bolts, curved washers, and hex nuts provided in the kit (Figure 15).

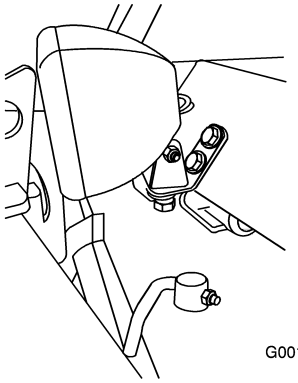


Figure 15

Note: Before installing the nut on each of the lower bolts, slip the harness clips onto the light kit wire harness and install each of the clips on a lower bolt between the backside of the footrest and the hex nut (Figure 16).

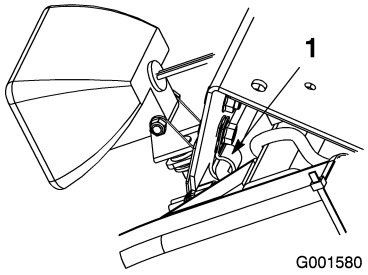


Figure 16

1. Harness clip

2. Secure the side lamp and attached bracket to the frame using a bolt, a curved washer, and a hex nut (Figure 17).

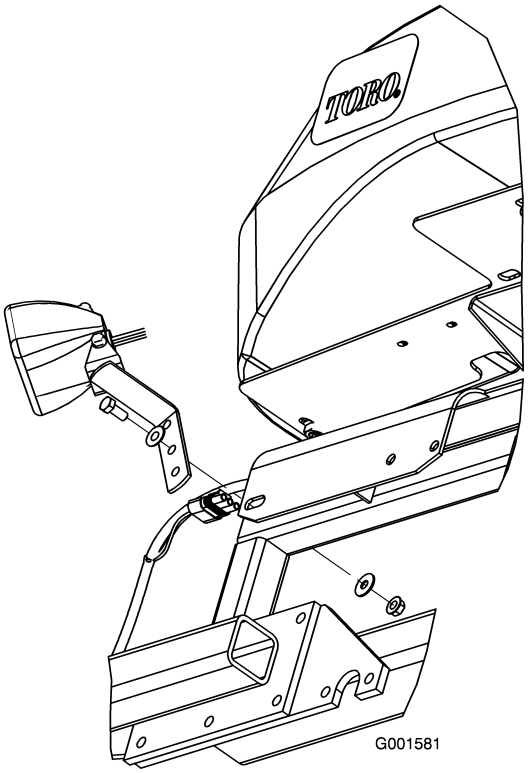


Figure 17

3. Connect the side light wire connector to the light kit wire harness connector (Figure 18).

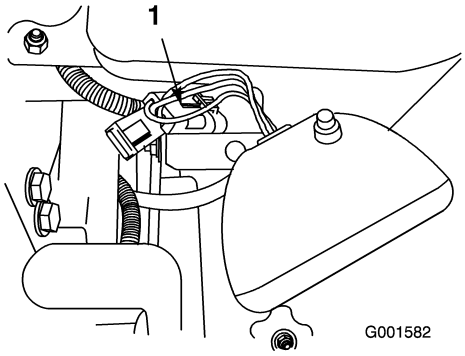


Figure 18

1. Light kit wire harness connector

4. Connect the 2 wire connectors of the front lights to the connectors on the light kit wire harness (Figure 18).

5. Secure the light kit wire harness to the frame with 2 cable ties, one near the left front light (Figure 19) and the other toward the control panel.

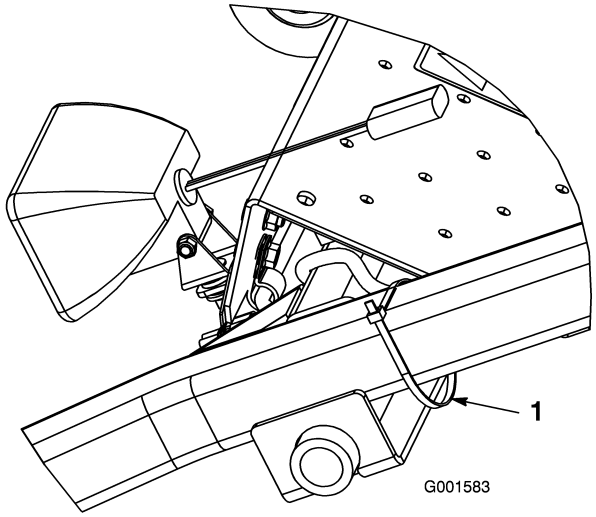


Figure 19

1. Cable tie

6. Set each lamp to the desired position and tighten the nut on the lamp bracket (Figure 20).

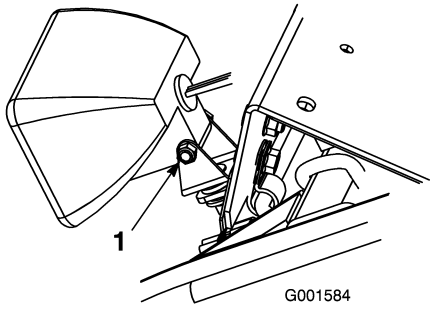


Figure 20

1. Nut on the lamp bracket

Step 7

Installing the Fuse

Parts needed for this step:

1	Fuse (20 amp)

Procedure

Note: Skip this procedure if you installed the fuse already when installing the adaptor on a diesel mower.

Install the fuse into the fuse block/connector as appropriate for your mower; refer to your mower *Operator's Manual* for more information on installing fuses.

Note: If you are installing this kit on a Z500 series mower, install the fuse into the accessories fuse block slot (Acc.) or if it is not labeled, the open fuse block slot with the purple and white wires.